Superfund cleanup nearing pivotal stage

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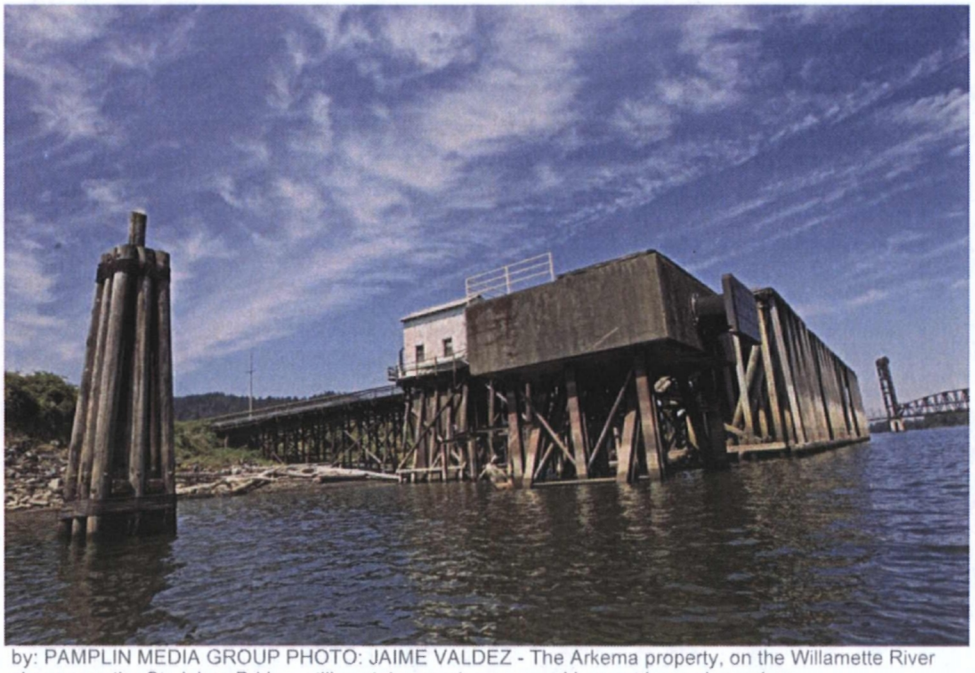
No option ideal for mitigating toxic risk on Willamette



by: PAMPLIN MEDIA GROUP PHOTO: JAIME VALDEZ - The Arkema property, on the Willamette River shore near the St. Johns Bridge, still contains carcinogens and has not been cleaned up.

Travis Williams stands in front of a razor-wire fence on the east bank of the Willamette River in North Portland, a vestige of the industrial wasteland the site used to be.

"Do you smell that? You can still smell the creosote," Williams says, describing it as a mix of gasoline and motor oil, something you might catch a whiff of at a railroad track.

As recently as 1990, the McCormick and Baxter Creosoting Co. dumped toxic chemicals into the river at its plant a mile south of the St. Johns Bridge — everything from the wood-treatment substance creosote to pentachlorophenol, arsenic, copper, chromium, zinc and other contaminants — which subsequently seeped into the soil and riverbed.

Today the McCormick and Baxter site is one of the few Portland Harbor Superfund sites that has been transformed by an early voluntary cleanup, a $30 million process that began in the 1990s.

Williams admires the meadow and riverbank now revegetated with native plants — such as cottonwoods, willows and spiraea — and sees it as an example of the potential for the other Superfund cleanups still to come.

As if to prove a point, a brown bunny hopped out of hiding as he spoke. "Good for him, trying to survive out here," Williams says.

"It's representative of what's possible, not perfect — but it's so much better than it was."

The 13-year-old Superfund effort has been a long and convoluted political process, involving dozens of public and private agencies, a frightening laundry list of toxins, and a price tag that could soar to $2.2 billion.

There have been lots of stops and starts, but the Superfund process is finally coming to a head. The U.S. Environmental Protection Agency is expected to announce its proposed cleanup plan next year, soliciting public feedback on how to proceed before a final binding order is rolled out.

Cleanup method undecided

There's one central question: What should be done with all of the toxic sludge?

Should it be "capped" with a giant blanket of cement tiles, as already has been done at McCormick and Baxter and other sites?

Should it be dredged and placed in a "contained disposal unit" somewhere along the river?

Should it be trucked to a landfill for hazardous waste in Eastern Oregon?

Or should it be treated with emerging technologies not yet been proven on projects of this scale, like "biochar" soil remediation or toxin-eating microbes?

"None of these solutions are perfect," Williams says. "If we're removing sand, it has to go somewhere."

Williams wants people to get involved in the process, to ensure that the EPA lands on the best solution for protecting human health as well as wildlife and the ecosystem.

Jim Anderson, the Oregon Department of Environmental Quality section manager for the Portland Harbor, has tried to spread awareness of the Superfund process at community events, neighborhood fairs and the Portland Harbor Community Advisory Group.

"It's tough to get people involved, especially when so much of it is process, but we're getting to the point where the process is turning into action," Anderson says. "We're not that far away from picking remedies, and once it's picked they'll see construction."

Capping is far cheaper than dredging, because contaminants are left in place.

Dredging involves heavy equipment and barging the material to a facility. It may entail more short-term risks as sediment is stirred up, but the contaminants would be gone, rather than just out of sight.

"It's risk management versus risk reduction," Anderson says.

Chemical and political stew

The Portland Harbor Superfund process is uniquely complex.

While the boundaries haven't been officially defined, the Superfund target area stretches for 10 miles, between the St. Johns and Fremont bridges, and could include about 40 properties on the river plus 100 onshore sites that share the groundwater and stormwater.

A canoe trip down the river reveals quiet, almost ethereal signs of life everywhere: bald eagles and osprey that fly overhead and perch on wooden pilings and dry docks; barges; people on jet skis and jet boats; kayakers who cruise the waterway; and the thrum of ship-repair and other industrial operations.

by: PAMPLIN MEDIA GROUP PHOTO: JAIME VALDEZ - Travis Williams, executive director of Willamette Riverkeeper, stands on the shore near McCormick and Baxter Creosoting Co., a cleaned-up site once contaminated by creosote and other chemicals dumped into the Willamette River.

Unlike New York's Hudson River or Wisconsin's Fox River — both huge Superfund sites with cleanups under way — there's no single party liable for the damages.

The EPA has identified more than 150 "potentially responsible parties" in Portland's Superfund effort. Of those, 14 have started paying for the cleanup, including the city of Portland, Port of Portland, NW Natural, Gunderson LLC, Union Pacific Railroad and Siltronic Corp.

Ten of the property owners operate as the Lower Willamette Group. Other parties include six tribal governments, DEQ and the EPA, the lead agency.

There's also not just one single contaminant, as in the Hudson and Fox rivers.

The Portland Harbor holds a variety of remnants from its industrial past, including high levels of carcinogens. The toxins include PCBs, polynuclear aromatic hydrocarbons, dioxins, mercury, traces of pesticides such as DDT (banned by the EPA in 1972), and the herbicide found in Agent Orange.

An EPA report found 29 contaminants that pose a risk to human health and 89 that pose a risk to birds, mammals and fish. That toxic cocktail doesn't pose a health risk for swimmers or paddlers, as long as they don't drink the water.

"I get asked all the time if it's safe to swim in the Willamette," Anderson says. Ironically, he cautions them not about the risks associated with harbor contaminants, but risks from the city's combined sewer overflow. Those untreated sewage overflows are much less frequent since the city completed its Big Pipe storm sewer improvements.

Fish are a different story. The harbor's contaminants have increased toxicity as they move up the food chain, since they "bioaccumulate" in the fish — specifically bass, catfish and carp.

Salmon and steelhead, which migrate through the Willamette, don't pose that risk.

In early July, Willamette Riverkeeper paid to post four new multilingual fish advisory signs at Swan Island, Cathedral Park, Kelly Point and the Eastbank Esplanade.

With its small staff of four and scores of volunteers, the group also hosts river restoration work parties and the annual Paddle Oregon, happening Aug. 16.

There's also the fourth-annual Great Willamette Cleanup on Oct. 5, which attracted 900 people last year. Williams also has written a field guide to the Willamette River, and recently launched a new guide for paddlers at http://willamettewatertrail.org.

"Whether we harvest fish from the river, paddle, swim, or simply care about the river's well-being," Williams says, "having a cleaned-up river benefits our health and our quality of life."

He has a favorite slogan: "Love the Willamette, dammit!"